GRADE 5 MATHEMATICS				
	DISTINGUISHED	**PROFICIENT**	**APPRENTICE**	**NOVICE**
Skills, Concepts and Relationships	Student demonstrates comprehensive understanding of 5th grade skills, concepts, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as stated on Kentucky Core Content.	Student demonstrates understanding of 5th grade skills, concepts, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as stated on Kentucky Core Content most of the time.	Student demonstrates understanding of 5th grade skills, concepts, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as stated on Kentucky Core Content some of the time.	Student rarely demonstrates understanding of 5th grade skills, concepts, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as stated on Kentucky Core Content.
Mathematical Strategies	Student consistently implements appropriate strategies (may include but not limited to use of solving simpler problems, use of tables, diagrams, make a table, chart, diagram, estimation).	Student implements appropriate strategies (may include but not limited to use of solving simpler problems, drawing a picture, estimation, making a chart or table) most of the time.	Student attempts to use strategies (may include but not limited to use of simpler problems, drawing a picture, estimation, making tables, diagrams) to solve problems some of the time.	Student rarely demonstrates understanding of problems and fails to apply an appropriate strategy.
Understanding	Student demonstrates an extensive understanding of the problem with correct solutions.	Student demonstrates a general understanding of the problem with correct solutions most of the time (correct and complete, with minor computational errors possible).	Student demonstrates understanding of the problem with correct solutions some of the time.	Student rarely demonstrates understanding of the problems with incomplete or incorrect solutions.
Terminology and Representations	Student uses appropriate and accurate mathematical terminology and representations (e.g., pictures, charts, graphs, tables, diagrams, and/or notation) in a clear and concise manner.	Student uses appropriate and accurate mathematical terminology and representations (e.g., pictures, charts, graphs, tables diagrams, and/or notation) most of the time.	Student attempts to use mathematical terminology and/or representations (e.g., pictures, charts, graphs, tables, diagrams, and/or notation) but terminology/ representations may be unclear and/or misused.	Student rarely or ineffectively uses mathematical terminology and/or representations, which are appropriate for 5th grade.
Reasoning	Student demonstrates mathematical reasoning (*support) in an appropriate and consistent manner.	Student demonstrates mathematical reasoning (*support), but may be unclear, or incomplete.	Student demonstrates limited mathematical reasoning (*support).	Student rarely demonstrates appropriate mathematical reasoning (**support is not present).

*Support references the student's ability to provide supporting evidence to his/her reasoning
**Support is not evident in the Novice performance.

GRADE 8 MATHEMATICS				
	DISTINGUISHED	**PROFICIENT**	**APPRENTICE**	**NOVICE**
Skills, Concepts and Relationships	Student demonstrates a comprehensive understanding of 8th grade skills, concepts, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as defined by Kentucky's Core Content.	Student demonstrates understanding of 8th grade skills, concepts, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as defined by Kentucky's Core Content most of the time.	Student demonstrates understanding of 8th grade skills, concepts, and relationships in number/ computation, geometry/ measurement, probability/ statistics, and algebraic ideas as defined by Kentucky's Core Content some of the time.	Student rarely demonstrates understanding of 8th grade skills, concepts, and relationships in number/ computation, geometry/ measurement, probability/ statistics, and algebraic ideas as defined by Kentucky's Core Content.
Mathematical Strategies	Student consistently implements an appropriate strategy (e.g., making a table, a diagram, guess and check, using technology, or working a simpler problem) to solve problems.	Student accurately uses an appropriate strategy (e.g., making a table, a diagram, guess and check, using technology, or working a simpler problem) to solve problems most of the time.	Student attempts to use appropriate strategies (e.g., making a table, a diagram, guess and check, using technology, or working a simpler problem) to solve problems some of the time.	Student attempts to implement strategies for solving problems but may use inappropriate strategies (will not lead to a correct solution).
Understanding	Student demonstrates extensive understanding of problems by providing correct and complete solutions.	Student demonstrates a general understanding of problems by providing complete solutions most of the time with possible minor computational errors.	Student demonstrates understanding of problems as indicated by correct or complete solutions some of the time.	Student rarely demonstrates understanding of problems as indicated by incomplete or incorrect solutions.
Terminology and Representations	Student uses appropriate and accurate mathematical terminology and representations (symbols, graphs, tables, diagrams, models) in a clear and concise manner to communicate a sequential development of the solution.	Student uses appropriate and accurate mathematical terminology (e.g., central tendency) and/or representation (symbols, graphs, tables, diagrams, models) effectively most of the time.	Student uses some mathematical terminology and/or representations (symbols, graphs, tables, diagrams, models), but terminology/representations may be unclear or misused (e.g., substituting the acronym LCM for GCF).	Student rarely or ineffectively uses mathematical terminology and/or representation that are appropriate for 8th grade.
Reasoning	Student consistently demonstrates appropriate mathematical reasoning (e.g., checking the reasonableness of results for all parts of the problem).	Student demonstrates appropriate mathematical reasoning but may have gaps (shows the "what" with gaps in "why").	Student demonstrates appropriate mathematical reasoning some of the time.	Student rarely uses appropriate mathematical reasoning or no mathematical reasoning at all.

GRADE 11 MATHEMATICS				
	DISTINGUISHED	**PROFICIENT**	**APPRENTICE**	**NOVICE**
Skills, Concepts and Relationships	Student demonstrates an extensive understanding of concepts, skills, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as defined by Kentucky's Core Content for high school students.	Student demonstrates an understanding of concepts, skills and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as defined by Kentucky's Core Content for high school students most of the time.	Student demonstrates understanding of concepts, skills, and relationships in number/computation, geometry/measurement, probability/statistics and algebraic ideas as defined by Kentucky's Core Content for high school students some of the time.	Student rarely demonstrates understanding of concepts, skills, and relationships in number/computation, geometry/measurement, probability/statistics, and algebraic ideas as defined by Kentucky's Core Content for high school students.
Mathematical Strategies	Student demonstrates consistent, effective application of the problem-solving process. Student consistently shows evidence of a well-developed plan for solving problems, using appropriate procedures, sequence of steps, and relationships between the steps	Student demonstrates effective application of the problem-solving process by showing evidence of a well-developed plan for solving problems, using appropriate procedures, sequence of steps, and relationships between the steps most of the time.	Student demonstrates correct application of the problem solving process by implementing appropriate strategies for solving problems some of the time.	Student rarely demonstrates appropriate problem solving skills and/or rarely applies the problem-solving process correctly.
Understanding	Student demonstrates an extensive understanding of problems and procedures by arriving at complete and correct solutions. (Student rarely has minor computational errors that do not interfere with conceptual understanding).	Student demonstrates a general understanding of problems and procedures by arriving at correct and complete solutions most of the time. (Student may have some minor computational errors: errors that do not interfere with conceptual understanding).	Student demonstrates some understanding of problems and procedures by arriving at correct and complete solutions some of the time.	Student rarely demonstrates understanding of problems and procedures by arriving at solutions that may be incorrect or incomplete.
Terminology and Representations	Student consistently and effectively uses appropriate and accurate mathematical representations/models (symbols, graphs, tables, diagrams, models) and correct mathematical terminology to communicate in a clear and concise manner.	Student uses appropriate and accurate mathematical representations/models (symbols, graphs, tables, diagrams, models) and correct mathematical terminology to effectively communicate a sequential development of the solution most of the time.	Student uses appropriate and accurate mathematical representations/models (symbols, graphs, tables, diagrams, models) and correct mathematical terminology appropriate for high school students some of the time.	Student rarely uses appropriate mathematical representations/models (symbols, graphs, tables, diagrams, models) and correct mathematical terminology appropriate for high school students.
Reasoning	Student consistently and effectively demonstrates appropriate mathematical reasoning to solve problems (e.g., make and investigate mathematical conjectures, make generalizations,	Student demonstrates appropriate use of mathematical reasoning to solve problems (e.g., make and investigate mathematical conjectures, make generalizations, make	Student demonstrates appropriate use of mathematical reasoning (e.g., make and investigate mathematical conjectures, make generalizations, make predictions, and/or defend solutions) some of	Student rarely demonstrates appropriate use of mathematical reasoning.

	make predictions, and/or defend solutions).	predictions, and/or defend solutions) most of the time.	the time.	